UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,096	03/30/2001	Tsutomu Kurose	740250-836	2227

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EXAMINER
BURLESON, MICHAEL L

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/821,096	KUROSE, TSUTOMU
	Examiner	Art Unit
	Michael Burleson	2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-4* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-4* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3 and 4*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Priority

1.   Acknowledgment is made of applicant's claim for foreign priority under 35

U.S.C. 119(a)-(d).

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

2.   Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

3.   Regarding claims 1-4, applicant recites, "distinguishing halftone pixels from non-

halftone pixels in pixels" and "redetermined to be halftone pixels and are not lower than

a predetermined threshold density in density".

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Hsieh US

4403257.

        Regarding claim 1, As best understood by the claim language, Hsieh teaches of

a 3 by 9 bit window that is masked in the upper left corner of the page by window logic

(12) (column 2,lines 39-47,column 3,lines 56-67 and figure 1). Because the scanner

(10) can detect the upper left corner of a page, it reads on a method of edge detection

according to a predetermined algorithm. Hsieh teaches of using the output from the

window logic (12) as an address for the score table (13). He teaches of a method of

using numbers to indicate halftones (column 2,lines 48-53 and figure 1), which reads on

a method of distinguishing halftone pixels from non-halftone pixels in pixels making up

an image according to a predetermined algorithm based on a result of edge detection.

Hsieh teaches that a second processing step is appropriate to test whether any blocks

were inaccurately classified (column 2,lines 9-17). He teaches that a predetermined

threshold value to determine if that block was halftone or text, which concludes post

processing (column 4,lines 3-10). This predetermined threshold is a density threshold

because inventor states in the abstract, that for halftone areas may have been classified

as text because of very high or low density. This reads on the pixels, which have been

determined to be non-halftone pixels, according to said predetermined algorithm, are

continuous to the pixels determined to be halftone pixels according to said

predetermined algorithm including those which have been redetermined to be halftone

pixels and are not lower than a predetermined threshold density in density are all

redetermined to be halftone pixels.

Regarding claim 2, As best understood by the claim language, Hsieh teaches of

a 3 by 9 bit window that is masked in the upper left corner of the page by window logic

(12) (column 2,lines 39-47,column 3,lines 56-67 and figure 1). Because the scanner

(10) can detect the upper left corner of a page, it reads on a method of edge detection

according to a predetermined algorithm. Hsieh teaches of using the output from the

window logic (12) as an address for the score table (13). He teaches of a method of

using numbers to indicate halftones (column 2,lines 48-53 and figure 1), which reads on

a method of distinguishing halftone pixels from non-halftone pixels in pixels making up

an image according to a predetermined algorithm based on a result of edge detection.

Hsieh teaches that a second processing step is appropriate to test whether any blocks

were inaccurately classified (column 2,lines 9-17). He teaches that a predetermined

threshold value to determine if that block was halftone or text, which concludes post

processing (column 4,lines 3-10). This predetermined threshold is a density threshold

because inventor states in the abstract, that for halftone areas may have been classified as text because of very high or low density. This reads on each of the pixels, which have been determined to be non-halftone pixels, according to said predetermined algorithm and are not lower than a predetermined threshold density in density is redetermined to be a halftone pixel when the number of pixels which have been determined to be halftone pixels according to predetermined algorithm. Hsieh teaches that during the post processing, the program reads the bits from left to right of each line (column 3,lines 55-67 and column 4,lines 1-9). He teaches that each block count is compared to a predetermined threshold value to determine if that block was halftone or text, which concludes post processing (column 4,lines 3-10). This reads on those which have been redetermined to be halftone pixels in a predetermined region including therein the pixel is larger than a predetermined threshold number, the pixel to be determined whether it is redetermined to be a halftone pixel being shifted in sequence.

Regarding claim 3, As best understood by the claim language, Hsieh teaches a 3 by 9 bit window that is masked in the upper left corner of the page by window logic (12) (column 2,lines 39-47,column 3,lines 56-67 and figure 1). Because the scanner (10) can detect the upper left corner of a page, it reads on a method of edge detection according to a predetermined algorithm. Hsieh teaches of using the output from the window logic (12) as an address for the score table (13). He teaches of a score table (13) that indicates halftones and non-halftones using numbers 0-9 to indicate halftones, -1 to indicate text and 0 to indicate inconclusive bit patterns (column 2,lines 48-54). This reads on an apparatus for distinguishing halftone pixels from non-halftone pixels in

pixels making up an image according to a predetermined algorithm based on a result of edge detection for determining whether the pixels are edge pixels and is characterized by having. Hsieh teaches of a post processing logic (19) (column 3,lines 10-67), where a second processing step is appropriate to test whether any blocks were inaccurately classified (column 2,lines 9-17). He teaches that a predetermined threshold value to determine if that block was halftone or text, which concludes post processing (column 4,lines 3-10). This predetermined threshold is a density threshold because inventor states in the abstract, that for halftone areas may have been classified as text because of very high or low density.

Regarding claim 4, As best understood by the claim language, Hsieh teaches a 3 by 9 bit window that is masked in the upper left corner of the page by window logic (12) (column 2,lines 39-47,column 3,lines 56-67 and figure 1). Because the scanner (10) can detect the upper left corner of a page, it reads on a method of edge detection according to a predetermined algorithm. Hsieh teaches of using the output from the window logic (12) as an address for the score table (13). He teaches of a score table (13) that indicates halftones and non-halftones using numbers 0-9 to indicate halftones, -1 to indicate text and 0 to 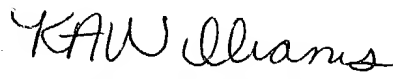indicate inconclusive bit patterns (column 2,lines 48-54). This reads on an apparatus for distinguishing halftone pixels from non-halftone pixels in pixels making up an image according to a predetermined algorithm based on a result of edge detection for determining whether the pixels are edge pixels and is characterized by having. Hsieh teaches of a post processing logic (19) (column 3,lines 10-67), where a second processing step is appropriate to test whether any blocks were inaccurately

classified (column 2,lines 9-17). He teaches that each block count is compared to that a predetermined threshold value to determine if that block was halftone or text, which concludes post processing (column 4,lines 3-10). This predetermined threshold is a density threshold because inventor states in the abstract, that for halftone areas may have been classified as text because of very high or low density. Hsieh teaches that during the post processing, the program reads the bits from left to right of each line (column 3,lines 55-67 and column 4,lines 1-9). This reads on those which have been redetermined to be halftone pixels in a predetermined region including therein the pixel is larger than a predetermined threshold number, the pixel to be determined whether it is redetermined to be a halftone pixel being shifted in sequence.

Conclusion

Any inquiry concerning this communication should be directed to Michael Burleson whose telephone number is (703) 305-8683 and fax number is (703) 746-3006. The examiner can normally be reached Monday thru Friday from 8:00 a.m. – 4:30p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached at (703) 305-4863

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER

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